

EXHIBIT A

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

SANFORD S. WADLER,

Plaintiff,

v.

BIO-RAD LABORATORIES, INC., a Delaware
Corporation; NORMAN SCHWARTZ; LOUIS
DRAPEAU; ALICE N. SCHWARTZ; ALBERT J.
HILLMAN; DEBORAH J. NEFF,

Defendants.

Case No. 3:15-cv-2356

EXPERT REPORT OF E. EMRE CARR, Ph.D., CFA

Submitted on July 1, 2016

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I. Introduction and Assignment

1. Plaintiff Sanford S. Wadler was employed by Bio-Rad Laboratories, Inc. (“Bio-Rad”) from 1989 until June 2013. At the time of his termination, Mr. Wadler was Bio-Rad’s General Counsel, among other titles. I was retained by counsel for Bio-Rad to evaluate Mr. Wadler’s role in (i) the delay of Bio-Rad’s annual report on Form 10-K (“10-K”) filed with the U.S. Securities and Exchange Commission (“SEC”); (ii) the significant deficiencies in internal control as of December 31, 2012 stated in the 10-K; and (iii) events discussed in Mr. Wadler’s complaint¹ in the context of U.S. Generally Accepted Accounting Principles (“U.S. GAAP”); SEC and Public Company Accounting Oversight Board (“PCAOB”) regulations; and the *Internal Control – Integrated Framework* published by the Committee of Sponsoring Organizations (“COSO”) of the Treadway Commission. The following paragraphs contain background for topics covered in this report.
2. In 2009, Bio-Rad executives became aware of potential violations of the Foreign Corrupt Practices Act (“FCPA”) and the company hired an outside law firm to conduct an investigation into potential FCPA violations.² In May 2010, Bio-Rad made a voluntary disclosure of potential FCPA violations to the Department of Justice (“DOJ”) and the SEC.³
3. In 2011, Life Technologies Corporation (“Life Tech”), a licensor of technology used by Bio-Rad, exercised a contractual right to audit royalties paid by Bio-Rad (“Life Tech Royalties”), including those related to sales in China.⁴
4. The company’s investigation into FCPA violations, led by an outside law firm, substantially concluded in January 2012.⁵
5. On February 8, 2013, Mr. Wadler made allegations regarding “serious and prolonged violations of the FCPA in Bio-Rad’s business in China.”⁶ Bio-Rad informed the DOJ and the SEC of these allegations and retained two outside law firms to perform a second FCPA investigation.⁷

¹ Sanford S. Wadler, v. Bio-Rad Laboratories, Inc., Norman Schwartz, Louis Drapeau, Alice N. Schwartz, Albert J. Hillman, and Deborah J. Neff, Case No. 3:15-cv-2356 May 27, 2015 (the “Complaint”).

² Complaint ¶ 14. See also, Declaration of Louis Drapeau in Support of Response of Bio-Rad Laboratories, Inc. to Complaint of Retaliatory Practices Under the Sarbanes-Oxley Act, January 27, 2014 (hereinafter referred to as “Drapeau Declaration”), ¶¶3-4.

³ Bio-Rad Form 8-K and Exhibit 99.1 attached to Form 8-K, filed on May 4, 2010. See also, Drapeau Declaration, ¶5.

⁴ Declaration of Christine Tsingos in Support of Response of Bio-Rad Laboratories, Inc. to Complaint of Retaliatory Practices Under the Sarbanes-Oxley Act, March 19, 2014 (hereinafter referred to as “Tsingos Declaration”), ¶15.

⁵ Drapeau Declaration ¶4.

⁶ BIORAD0000009220-32.

⁷ Drapeau Declaration, ¶¶8-9.

6. On February 26, 2013, Bio-Rad announced preliminary unaudited results for the fourth quarter and the year ended December 31, 2012.⁸ Those results included an accrual for Life Tech Royalties.⁹
7. Following the earnings announcement, Mr. Wadler objected to the amount recorded for the accrual and demanded that it be increased.¹⁰ This would require Bio-Rad to revise its unaudited results announced on February 26, 2013.
8. On March 4, 2013, Bio-Rad filed a Form 12b-25, notifying the SEC that it would be unable to file its 10-K for the year ended December 31, 2012 by the filing deadline.¹¹ In citing its reasons for the late filing, Bio-Rad stated “the Company has not finalized its assessment of the effectiveness of its internal control over financial reporting due in part to recently raised issues and has not finalized an accrual for royalties payable by the Company.”¹²
9. On March 18, 2013, Bio-Rad filed its 10-K and announced that it had revised its previously announced earnings, because it had “increased the accrual for royalties and related interest.”¹³
10. The second FCPA investigation resulted in no findings of corruption and concluded in June 2013.¹⁴

II. Qualifications

11. I am a Director in the Capital Markets Group at Berkeley Research Group. I have consulted in engagements that involve public corporations, their executives, hedge funds, banks, securities and commodities broker or dealers, insurance companies, investment companies, and pension funds. The subjects of these engagements included financial reporting, public company disclosures, executive compensation, U.S. GAAP, SEC filing requirements, SEC securities issuance regulations, corporate internal controls, registered and unregistered securities issuances, securities and commodities trading, due diligence related to securities offerings, and fiduciary responsibilities of executives and directors.
12. Previously, I was a Senior Financial Economist at the Division of Risk, Strategy, and Financial Innovation (“RiskFin”) at the SEC, later renamed the Division of Economic and Risk Analysis. RiskFin was created as the agency’s “think tank” to provide sophisticated,

⁸ Bio-Rad Form 8-K and Exhibit 99.1 attached to Form 8-K, filed on February 26, 2013.

⁹ Bio-Rad 2012 Form 10-K, filed on March 18, 2013, (“2012 Form 10-K”), at p. 21.

¹⁰ Wadler Exhibit 10 (BIORAD0000021099-100).

¹¹ Drapeau Exhibit 31 (Bio-Rad Form 12b-25, filed on March 4, 2013).

¹² Drapeau Exhibit 31 (Bio-Rad Form 12b-25, filed on March 4, 2013).

¹³ 2012 Form 10-K, at p. 21.

¹⁴ Drapeau Declaration, at ¶9.

interdisciplinary analysis and economic advice across the entire spectrum of SEC activities, including policymaking, rulemaking, enforcement, and examinations. As a Senior Financial Economist, I provided economic advice on a number of SEC rules and rule proposals and enforcement matters relating to short-term financing and liquidity, executive compensation disclosures, derivatives, accounting and disclosure, conflicts of interest, shelf registrations, and private securities offerings. I have participated in enforcement investigations and compliance inspections that relate to equities, fixed income securities, including convertible bonds, swaps and other derivatives, especially in relation to their valuations and disclosures provided to investors.

13. During my tenure at the SEC, I was the subject matter expert in the development of an automated tool to detect accounting and disclosure violations in SEC filings. I participated in several SEC enforcement matters that involved, among other things, U.S. GAAP and IFRS accounting violations, materially misleading disclosures or omissions of disclosures, disclosures made in conjunction with non-registered securities offerings, and transactions with non-substantive entities.
14. During my tenure at the SEC, I was one of the liaisons for the rules promulgated by the Public Company Accounting Oversight Board ("PCAOB"), including the rulemaking on "Communications with Audit Committees."¹⁵
15. I have consulted in a large number of engagements that involved among other things accounting fraud, U.S. GAAP, disclosures in SEC filings, board and investments advisor fiduciary duties, and public company internal controls.
16. I have taught graduate level courses on financial statement analysis for valuation and credit decisions, corporate finance, and accounting at the University of Maryland, Columbia University, University of Southern California, University of Toronto, and Northwestern University. My research on securities and banking regulation has been published and presented in leading academic outlets.
17. I earned my Ph.D. degree in Accounting Information and Management at the Kellogg School of Management at Northwestern University. My Ph.D. dissertation examined the interaction between financial, regulatory, tax, and accounting motivations for securitizations. In addition, I completed all graduate work except dissertation for the Ph.D. degree in finance. I have been published in academic journals, including two articles examining the effects of the Sarbanes-Oxley Act.
18. I earned my MBA degree with a concentration in finance from the University of Southern California.

¹⁵ PCAOB, Auditing Standard No. 16 (https://pcaobus.org/Standards/Auditing/pages/auditing_standard_16.aspx).

19. I am a Certified Financial Analyst (CFA) charterholder.
20. My *curriculum vitae*, including a list of all publications authored in the past ten years and a list of all other cases at which I have testified as an expert during the previous four years, is attached hereto as Appendix A.
21. In forming my opinions in this case, I have primarily relied upon my professional experience and the documents disclosed in the footnotes or body of this report. Please refer to Appendix B for a comprehensive list of documents relied upon for this report.

III. Summary of Opinions

22. Internal controls over financial reporting include established processes and control activities to ensure the timely and accurate filing of financial statements. Mr. Wadler did not act appropriately as a General Counsel by failing to voice his concerns in a timely manner—at the very least before the earnings release—about items that were under his responsibility for a long time.
23. With respect to Mr. Wadler's involvement in the delayed 10-K filing:
 - a. Mr. Wadler's intervention in the amount of the Life Tech Royalties accrual was not timely. Mr. Wadler did not adhere to Bio-Rad's schedule for the accounting close process and instead raised new objections based on information that was previously available at and before the accounting close meeting with external auditors. I'm not aware of any new information related to the Life Tech Royalties accrual between the meeting with auditors on February 21, 2013, in which Mr. Wadler had a pivotal role and opportunity to voice his concerns, if any, and when he actually voiced his concerns two days before the 10-K filing deadline.¹⁶
 - b. Mr. Wadler's intervention in the amount of the Life Tech Royalties accrual was misguided. Mr. Wadler's responsibility as General Counsel was to *provide the inputs* for the accountants to determine the appropriate accrual. It was Bio-Rad's accountants' responsibility to determine the accrual under U.S. GAAP, not Mr. Wadler's responsibility or prerogative to dictate the amount of the accrual.¹⁷
24. With respect to Mr. Wadler's FCPA allegations:

¹⁶ Wadler Exhibit 10 (BIORAD0000021099-100).

¹⁷ Financial statements prepared in accordance with U.S. GAAP require the use of estimates, such as the estimate for the Life Tech Royalties. Accrual of an expense for financial reporting purposes is a concept different from earmarking funds to pay for the expense.

- a. Mr. Wadler had substantial responsibility for ensuring that certain Chinese-language distributor agreements contained appropriate anti-corruption provisions long before February 2013.
 - b. Mr. Wadler's conclusion that there were FCPA violations in China was not supported by the documents he relied on, which he claimed contained purported inconsistencies in product lists included in different purchase contracts.
25. Mr. Wadler contributed to, and could have prevented, a significant deficiency in internal control over financial reporting disclosed in Bio-Rad's 2012 Form 10-K.
26. Publicly traded companies face serious consequences from not filing with the SEC their annual reports on Form 10-K during the time periods prescribed by regulations.

IV. The Role of the General Counsel

27. A public company's General Counsel's role in the internal control of the firm is primarily relevant to operations and compliance objectives.¹⁸ First, as a senior executive of the firm, the General Counsel, along with other senior executives, is broadly responsible for internal control of the firm.¹⁹ Second, the General Counsel and his personnel are responsible for defining effective controls for compliance with laws, regulations and managing the possibility of lawsuits.²⁰ Third, related to financial reporting, the General Counsel meets with external auditors and provides a representation letter describing and evaluating material litigation, claims, and assessments that exist at the date of the balance sheet being reported on, and during the period from the balance sheet date to the date the information is being furnished.²¹ A legal representation letter is an auditor's primary means of obtaining corroboration of the information furnished by management concerning litigation, claims, and assessments.

¹⁸ COSO 1992 Framework, at Reporting to External Parties.

¹⁹ COSO 1992 Framework, at Chapter 8: Roles and Responsibilities, Responsible Parties, Management and Reporting to External Parties; COSO 2013 Framework, at Appendix B Roles and Responsibilities, Senior Management; See also, Final Rule: Management's Report on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports (<https://www.sec.gov/rules/final/33-8238.htm>).

²⁰ COSO 1992 Framework, at Chapter 8: Roles and Responsibilities, Responsible Parties, Management; COSO 2013 Framework, at Appendix B Roles and Responsibilities.

²¹ AS 2505: Inquiry of a Client's Lawyer Concerning Litigation, Claims, and Assessments. Predecessor audit guidance includes Statements on Auditing Standards No. 12, which was issued in 1976.

A. Internal Controls

28. Bio-Rad's management used the criteria set forth by COSO to evaluate the effectiveness of Bio-Rad's internal control over financial reporting as of December 31, 2012.²²
29. COSO is a voluntary, private-sector organization dedicated to guiding executive management toward the establishment of effective, efficient, and ethical business operations. COSO sponsors and disseminates frameworks and guidance regarding internal controls, risk management, and fraud deterrence that are based on in-depth research, analysis, and best practices.²³
30. In 1992, COSO released its *Internal Control – Integrated Framework* (the original framework). "The original framework has gained broad acceptance and is widely used around the world. It is recognized as a leading framework for designing, implementing, and conducting internal control and assessing the effectiveness of internal control."²⁴ In 2013, COSO released an updated *Internal Control – Integrated Framework* (the "2013 Framework" or the "Framework"). The 2013 Framework retained the core definition of internal control and the five components of internal control from the original framework and provided enhancements and clarifications that are intended to ease use and application.²⁵ The COSO Framework satisfies the SEC's criteria and may be used as an evaluation framework for purposes of management's annual internal control evaluation and disclosure requirements.²⁶
31. General Counsel (also referred to as "Chief Legal Officer" or "in-house counsel" and used interchangeably in this report) is considered to be a member of a company's senior management.²⁷
32. As a member of senior management, the General Counsel supports the CEO with respect to internal control by:²⁸

²² 2012 Form 10-K, at p. 78.

²³ See www.coso.org for more information.

²⁴ COSO 2013 Framework, at Foreword.

²⁵ COSO, *Internal Control - Integrated Framework*, Post Public Exposure Version, September 2012 at Foreword.

²⁶ Final Rule: Management's Report on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports (<https://www.sec.gov/rules/final/33-8238.htm>).

²⁷ COSO 2013 Framework, at Appendix B Roles and Responsibilities, Senior Management.

²⁸ COSO 1992 Framework, at Chapter 8: Roles and Responsibilities, Responsible Parties, Management; COSO 2013 Framework, at Appendix B Roles and Responsibilities, Senior Management.

- Providing leadership and direction to management in terms of shaping entity values, standards, expectations of competence, organizational structure, and accountability that form the foundation of the entity's internal control system;
 - Maintaining oversight over the risks facing the entity;
 - Guiding the development and performance of controls at the entity level, and delegating to various levels of management the design, implementation, conduct, and assessment of internal control at different levels of the entity;
 - Communicating expectations; and
 - Evaluating internal control deficiencies and the impact on the ongoing and long-term effectiveness of the system of internal control.
33. Specifically, the General Counsel and his personnel are key to defining effective controls for compliance with laws, regulations, and managing the possibility of lawsuits.²⁹ The General Counsel is responsible for ensuring that legal, regulatory, and other requirements are understood and communicated to those responsible for effecting compliance.
34. Specialized compliance professionals can be helpful in defining and assessing controls for adherence to external reporting requirements such as those dictated by the SEC, the Internal Revenue Service, or the Department of Labor. Specialized compliance professionals can also be helpful in defining and assessing controls for adherence to internal requirements. For instance, the General Counsel may utilize compliance professionals to assist with a training program to ensure that provisions of the FCPA are understood and communicated throughout the company.
35. The Framework discusses and defines "policies and procedures." Policies reflect management's statement of what should be done to effect control and procedures consist of actions that implement a policy. Timeliness is an important attribute of effective policies. Procedures are designed to specify the timing of when a control activity and any follow-up corrective actions are performed. If procedures are not followed in a timely fashion, the usefulness of control activities is reduced.³⁰
36. For example, "as part of Bio-Rad's Year-End (and Quarterly) close process, [it] has a set of standard meetings and [procedures] to manage disclosure and reporting controls."³¹ The

²⁹ COSO 1992 Framework, at Chapter 8: Roles and Responsibilities, Responsible Parties, Management; COSO 2013 Framework, at Appendix B Roles and Responsibilities.

³⁰ COSO 1992 Framework, at Chapter 4: Control Activities and Chapter 5: Information and Communication; 2013 Framework, at Policies and Procedures.

³¹ Wadler Exhibit 10 (BIORAD0000021099-100).

procedures included a legal meeting between Mr. Wadler and Ernst & Young (“E&Y”), and the meeting occurred before the company’s earnings announcement.³² In my experience, it is common practice for auditor interaction with a company’s legal officers to occur prior to a company’s earnings announcement. Clearly, the General Counsel is responsible for implementing and following procedures to fulfill his role in the preparation and finalization of the financial statements. The General Counsel would be well aware of the purpose of such a meeting – to provide the auditors and accountants with any information pertinent to the finalization of the financial statements – and should be prepared as such.

37. As directed by the Sarbanes-Oxley Act of 2002, the SEC requires public companies to include in their annual reports a report of management on the company’s internal control over financial reporting. The report must include “a statement of management’s responsibility for establishing and maintaining adequate internal control over financial reporting.”³³ The preparation of the management report involves multiple parties at the management level, including the General Counsel.³⁴
38. The PCAOB provides guidance to auditors on the “financial reporting oversight role” in a public company. The PCAOB defines this role as one in which “a person is in a position to or does exercise influence over the contents of the financial statements or anyone who prepares them.”³⁵ Thus, the General Counsel is in a financial reporting oversight role.

B. Accounting for Legal Contingencies and the Legal Representations Letter

39. U.S. GAAP requires the disclosure or accrual of loss contingencies³⁶ – circumstances involving uncertainty that will ultimately be resolved when a future event occurs.³⁷ Litigation, claims, and assessments against a company represent potential loss contingencies. Auditors do not ordinarily possess the legal skills to make legal judgments

³² Wadler Exhibit 10 (BIORAD0000021099-100).

³³ Final Rule: Management's Report on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports (<https://www.sec.gov/rules/final/33-8238.htm>).

³⁴ “The preparation of the management report on internal control over financial reporting will likely involve multiple parties, including senior management, internal auditors, in-house counsel, outside counsel and audit committee members.” (<https://www.sec.gov/rules/final/33-8238.htm>)

³⁵ PCAOB Professional Standards Section 3. Auditing and Related Professional Practice Standards, Rule 3501. The AICPA Code of Professional Conduct (updated through October 26, 2015) also provides this definition for the term “key position.”

³⁶ Accounting Standards Codification (“ASC”) Master Glossary: a contingency is defined as “An existing condition, situation, or set of circumstances involving uncertainty as to possible gain (gain contingency) or loss (loss contingency) to an entity that will ultimately be resolved when one or more future events occur or fail to occur.”

³⁷ ASC 450.

concerning the litigation, claims, and assessments against a company. Accordingly, they seek opinions from in-house and outside counsels to provide those evaluations.³⁸

40. Estimated loss from a loss contingency is accrued if the loss is probable³⁹ and the loss can be reasonably estimated.⁴⁰ Accountants and auditors seek input from counsel as to both the probability and the amount of loss for legal contingencies. However, the estimation of the accruals under U.S. GAAP is a task for the accountants, not the General Counsel.⁴¹ Auditors provide reasonable assurance that those accruals are consistent with U.S. GAAP given the representations made by in-house and outside counsel.

41. Accrual of a loss contingency – i.e. for purposes of preparing financial statements – is a concept different from earmarking funds to pay for the expense—i.e. reserving funds to pay for something. According to U.S. GAAP:⁴²

Accrual of a loss related to a contingency does not create or set aside funds to lessen the possible financial impact of a loss. Confusion exists between accounting accruals (sometimes referred to as accounting reserves) and the reserving or setting aside of specific assets to be used for a particular purpose or contingency. Accounting accruals are simply a method of allocating costs among accounting periods and have no effect on an entity's cash flow.

42. In general, a loss contingency is estimated and recognized in the books when it is probable that a loss has been incurred at the date of the financial statements and the amount of loss can be reasonably estimated.⁴³

43. Typically, reasonable estimates of a contingent loss fall within a range of possible figures. If some amount within a range of loss appears at the time to be a better estimate than any other amount within the range, that amount shall be accrued.⁴⁴ When no amount

³⁸ AS 2505 *Inquiry of a Client's Lawyer Concerning Litigation, Claims, and Assessments*: "This section provides guidance on the procedures an independent auditor should consider for identifying litigation, claims, and assessments and for satisfying himself as to the financial accounting and reporting for such matters when he is performing an audit in accordance with the standards of the PCAOB."

³⁹ ASC Master Glossary: probable is defined as: "The future event or events are likely to occur."

⁴⁰ ASC 450.

⁴¹ See, for example, PCAOB Staff Audit Practice Alert No. 7, December 20, 2010, p. 4: "the auditor should gather sufficient and appropriate audit evidence relevant to the following factors: The existence of a condition, situation, or set of circumstances indicating an uncertainty as to the possible loss to an entity arising from litigation, claims, and assessments; The period in which the underlying cause for legal action occurred; The degree of probability of an unfavorable outcome; and The amount or range of potential loss." (Footnotes omitted).

⁴² ASC 450-20-05-8.

⁴³ ASC 450-20-25-2.

⁴⁴ ASC 450-20-30-1.

within the range is a better estimate than any other amount, however, the minimum amount in the range shall be accrued.⁴⁵

44. Accordingly, U.S. GAAP does not require the accrual to be the highest possible amount or the average of possible amounts. To the contrary, in my experience, it is common that no single estimate is more likely than others and the minimum amount within the range of possible amounts is accrued.

V. Mr. Wadler was Incorrect about Accruals for Loss Contingencies under U.S. GAAP and Overstepped his Role as General Counsel by Insisting on Determining the Life Tech Royalties Accrual rather than Facilitating Bio-Rad Accountants to Determine the Accrual

45. Mr. Wadler's responsibility was to estimate the likelihood of success in the Life Tech litigation and the possible range of outcomes for the settlement amount. It was not for him to dictate the actual accrual amount—which is governed by U.S. GAAP—based on his estimates. It is generally not appropriate for nonfinancial management to be significantly involved in a public company's accounting practices, and such involvement could, in fact, raise issues for the outside auditors. For instance, audit guidance includes the following fraud risk factor:⁴⁶

Nonfinancial management's excessive participating in or preoccupation with the selection of accounting principles or the determination of significant estimates.

46. As such, Mr. Wadler's responsibility was solely to provide the facts and circumstances related to litigation, claims, and assessments against Bio-Rad. As CFO, Christine Tsingos testified about the division of responsibility between Bio-Rad's legal department and its accounting department as follows:⁴⁷

When it comes to a financial impact or an accounting impact or accounting judgments, the legal department will supply facts and circumstances. The accounting department will apply the rules to look at what would be the appropriate accrual.

47. Furthermore, based on my review of Mr. Wadler's deposition transcript, Mr. Wadler does not understand how a company must account for loss contingencies under U.S. GAAP.⁴⁸

⁴⁵ ASC 450-20-30-1.

⁴⁶ AU Section 316 Consideration of Fraud in a Financial Statement Audit, A.2.

⁴⁷ Tsingos Deposition, 244:1-6.

⁴⁸ Wadler Deposition, 139:22-140:2; 141:8-12; 143:15-22; 212:20-213:5.

Although there are no requirements to do so, Bio-Rad's finance department, in late February 2013, attempted to educate Mr. Wadler about accounting for accruals in accordance with U.S. GAAP.⁴⁹ Yet, he still did not appear to understand the applicable rules because it was improper for him to insist that the accrual itself be increased rather than providing a range of predicted outcomes and their likelihood.

48. The settlement discussions with Life Tech were conducted in parallel with the possible purchase of other licenses.⁵⁰ Bio-Rad and Life Tech were discussing a "universal settlement" or a "comprehensive settlement", whereby a settlement payment would cover the royalty dispute and other patent issues.⁵¹
49. In that event, the portion of the settlement attributable to the purchase of a new license would not constitute a loss contingency and hence would not be accrued as such. Mr. Wadler's errors seem to come from his insufficient understanding that U.S. GAAP requires accountants to make allocations when multiple items are negotiated and priced in a single transaction.
50. In his General Counsel's letter to E&Y on March 18, 2013, Mr. Wadler stated that "This accrual is the best estimate at the time, but only in the context of the settlement of LT's various claims and LT's offer to settle all outstanding issues for \$39.9 million."⁵² Mr. Wadler's task was to provide his best estimate of how much of the \$39.9 million was attributable to the Life Tech Royalties settlement. In the extreme case, if the Life Tech Royalties amount were truly inseparable from the other items in the comprehensive settlement, then the accrual may not have been estimable and it might have been appropriate not to accrue anything under U.S. GAAP.
51. As General Counsel Mr. Wadler did not have to understand all these complexities of U.S. GAAP. He merely needed to provide the inputs that Bio-Rad accountants were asking from him. He did not do that before he eventually signed his representation letter on March 18, 2013 so that Bio-Rad would not miss its extended 10-K filing deadline.⁵³
52. From March 2011 through March 2012, a third party hired and paid for by Life Tech, audited the Life Tech Royalties.⁵⁴ That third party's audit report was issued in the spring of 2012.⁵⁵ Life Tech's third party report indicated that Bio-Rad might owe Life Tech as much as \$30.2 million including interest for Life Tech Royalties.⁵⁶ Therefore, even if Life

⁴⁹ Tsingos Deposition, 198:22-199-8; 206:25-207-14; 244:1-7.

⁵⁰ Tsingos Exhibit 78, at BIORAD0000021354; BIORAD0000013501.

⁵¹ Tsingos Deposition, 173:8-17.

⁵² Representation Letter to E&Y, March 18, 2013 (BIORAD0000024833-46, at BIORAD0000024842).

⁵³ Representation Letter to E&Y, March 18, 2013 (BIORAD0000024833-46).

⁵⁴ Tsingos Exhibit 78, at BIORAD0000021354.

⁵⁵ Tsingos Deposition, 80:9-15.

⁵⁶ BIORAD0000021355; Tsingos Deposition, 80:9-15.

Tech's assessment were acceptable to Bio-Rad, the contingent loss for Life Tech Royalties (and the amount to accrue) fell within an initial range between zero and \$30.2 million. As of the date of Life Tech's royalty audit report, \$30.2 million was the maximum amount Life Tech could demand based on the audit results.

53. Since the accounting rules require the accrual of the minimum amount within a range of equally likely possibilities,⁵⁷ it would have been appropriate to take a small accrual for the loss related only to the Life Tech Royalties dispute. When Mr. Wadler had previously discussed the factors contributing to the accrual with auditors and accountants, it was determined that the minimum or likely amount was \$1.8 million on February 26, 2010, and \$3.5 million on November 8, 2012 –for the quarter ending September 30, 2012.⁵⁸
54. Based on guidance in ASC 450 *Contingencies*, Bio-Rad's accounting department had determined that the Life Tech Royalties accrual was \$3.5 million as of September 30, 2012. According to U.S. GAAP, \$3.5 million could be either:⁵⁹
 - the best estimate within the range of estimates, or
 - if no figure within a range was a better estimate than another figure, the minimum amount in the range of estimates
55. E&Y agreed, on or before February 25, 2013, that \$3.5 million was an appropriate number for the accrual at that time.⁶⁰ Before the filing of Bio-Rad's 2012 10-K on March 18, 2013, the Life Tech Royalties accrual was increased to \$13.6 million.⁶¹ I have not found evidence that any event occurred between February 25 and March 18 to cause a change in the royalty accrual on the books at Bio-Rad.
56. Louis Drapeau, an independent director on Bio-Rad's Board and a Chair of the Board Audit Committee, talked about the lack of justification for the increase in the royalty accrual in his deposition:⁶²

Q: Okay. What did Mr. Stark [Jim Stark, Bio-Rad's Controller] tell you specifically about Mr. Wadler not being able to identify an event-driven reason for increasing the accrual?

A: Well, I was on the conference call with him. So Mr. Stark initially didn't necessarily have to tell me. But there was no justification other than, I feel

⁵⁷ ASC 450-20-30-1.

⁵⁸ Wadler Exhibit 9 (Wadler February 26, 2010 representation letter); Wadler November 8, 2012 representation letter.

⁵⁹ ASC 450-20-30-1.

⁶⁰ BIORAD0000013501; \$4.8 million including interest (Tsingos Exhibit 72).

⁶¹ BIORAD0000021353-55 at 55.

⁶² Drapeau Deposition, 125:18-126:3.

we ought to increase the reserve. And under Generally Accepted Accounting Principles, you have to have substantive reasons to increase the reserve.

57. Mr. Wadler lacked an understanding of the difference between accounting tasks (accounting for accruals in accordance with U.S. GAAP for financial reporting) with treasury tasks (managing cash flow, budgeting, and earmarking funds for certain payments in the course of business operations). The following excerpts from Mr. Wadler's testimony demonstrate his failure to distinguish between the litigation accrual for Life Tech Royalties and the escrow account set up in conjunction with the purchase of a license to the Cytonix technology that were discussed in parallel with Life Tech. Mr. Wadler insisted on not separating the accrual for a contingent loss from funds earmarked to pay for a license:⁶³

Q: Do you remember how far apart you and the company were?

A: It wasn't apart on the numbers. It was apart on – the **royalty accrual could not exist as just a separate item**. It had to be linked to the transaction that underlied it.

Q: And that was a reserve both for the royalty audit accrual and the Cytonix license?

A: No, the Cytonix wasn't reserved, because we had a holdback that we could pull that out of, so it didn't need to be reserved.

Q: Did the accrual need to be for the entire 25 million?

A: No, because **we had 12 of it in the holdback, so in a sense it was accrued**. If you wanted to consider the accrual the reserve plus the holdback, that would have been fine too. That's basically what I was trying to say in linking the two.

Q: The Life [Tech] accrual, when did you first raise that as an issue?

A: It wasn't an issue. It was a question of – **all I wanted to do was have statements that clearly link the two**. I didn't believe that people understood the linkage clearly enough. And it was when, you know, people were refusing to let me do that, that there were problems with giving an opinion. They wouldn't let me give an opinion as I wanted to. They wanted me to give them a legal opinion as the financial people wanted.

58. Therefore, Mr. Wadler's objection to the Life Tech Royalties accrual was both untimely and misguided. Critically, he did not voice his concerns in the accounting-close meetings with auditors before Bio-Rad's earnings release. His insistence that the accrual be increased demonstrated his lack of understanding of U.S. GAAP and a failure to observe

⁶³ Wadler Deposition, 139:22-140:2; 141:8-12; 143:15-22; 212:20-213:5.

the proper role of a General Counsel in providing inputs for the accrual as opposed to dictating the accrual amount itself.

VI. Mr. Wadler Made Severe Allegations Regarding Bio-Rad's Business in China on February 8, 2013 without Adequate Support

59. On February 8, 2013, Mr. Wadler reported to the Audit Committee that he had become aware of serious and prolonged violations of the FCPA in Bio-Rad's business in China. He advised that they must promptly conduct an in-depth investigation and also report the suspected violations to government agencies and to auditors immediately, because "the violations are so clear."⁶⁴
60. Mr. Wadler then explained that the two sources for his concerns were (i) apparent inconsistencies in product lists relating to sales in China; and (ii) the use of contracts in the Chinese language that did not contain books and records provisions that Bio-Rad uses in its English version of the contracts, which indicated to him that the FCPA was being violated. According to him, the "only conclusion" to be drawn was that the practices were endemic and high levels of the management within the company had to know they were happening.⁶⁵
61. While worth looking into further, the evidence that Mr. Wadler put forward was far from sufficient to draw Mr. Wadler's conclusions. The investigation that ensued not only showed that there were other, benign explanations that Mr. Wadler did not consider, but also that alternative explanations were more plausible. In addition, the concerning patterns that Mr. Wadler had just claimed to have found out were among his monitoring responsibilities as General Counsel all along.

A. Mr. Wadler Made Unsupported Allegations about Apparent Inconsistencies in Product Lists Relating to Sales in China

62. Mr. Wadler's first allegation on February 8, 2013 was that there were books and records violations related to Bio-Rad's sales in China.⁶⁶ Specifically, for the same sale, the number of items in a purchase contract between Bio-Rad and its Chinese distributor was different from the number of items in the purchase contract between the Chinese distributor and the end-user.⁶⁷

⁶⁴ Wadler Exhibit 7 (BIORAD0000009220-32, at 20-21).

⁶⁵ Wadler Exhibit 7 (BIORAD0000009220-32, at 20-21).

⁶⁶ Wadler Exhibit 7 (BIORAD0000009220-32, at 20).

⁶⁷ Wadler Exhibit 7 (BIORAD0000009220-32, at 20-21); Davis Polk, FCPA Inquiry: Status Report for the Board of Directors of Bio-Rad Laboratories presentation (BIORAD0000002393), at p. 19, 24-26.

63. Mr. Wadler attached sales documents he had originally received on November 1, 2012.⁶⁸ The contracts revealed the following:
- An application for contract order with accompanying commission statement. These documents were prepared by a sales agent and delivered to Bio-Rad China. The commission statement displayed five items with a list price of USD \$10,460.⁶⁹
 - Order cover and purchase order internally generated by Bio-Rad China. These documents display five items summing to a list price of USD \$10,460 and a sales price of USD \$10,100.⁷⁰
 - Purchase contract between Bio-Rad China and import/export (“I/E”) company. This document displayed five items summing to the sales price of USD \$10,100.⁷¹
 - Purchase contract between I/E company and end-user. This document displayed two items summing to the sales price of USD \$10,100 but included a note “details see attachment.” The attachment displayed five items.⁷²
64. Mr. Wadler claimed that free products were being used as bribes,⁷³ but that is not apparent from the documents. Products were packaged together and priced as a set,⁷⁴ but there was no indication that products disappeared or were being used as bribes.
65. Therefore, the set of sales documents that Mr. Wadler presented did not contain discrepancies that supported Mr. Wadler’s conclusions. As such, Mr. Wadler seems to have performed only a cursory review of sales contracts before he concluded that there were “serious and prolonged violations of the FCPA in Bio-Rad’s business in China.”⁷⁵

B. Mr. Wadler had Substantial Responsibility for Ensuring that the Chinese-Language Distributor Agreements Contained the Appropriate Anti-Corruption Provisions

66. Mr. Wadler added that he had recently learned that Bio-Rad’s Chinese-language distributor agreements did not include the anti-corruption provisions contained in Bio-Rad’s English-language distributor agreements. Mr. Wadler claimed that the non-

⁶⁸ Wadler Exhibit 6 (Cassingham email to Wadler, November 1, 2012).

⁶⁹ Wadler Exhibit 7 at BIORAD0000009220-32 at 27-28; See also, Davis Polk, FCPA Inquiry: Status Report for the Board of Directors of Bio-Rad Laboratories presentation (BIORAD0000002393), at p. 21.

⁷⁰ Wadler Exhibit 7 (BIORAD0000009220-32 at 24-25); See also, Davis Polk, FCPA Inquiry: Status Report for the Board of Directors of Bio-Rad Laboratories presentation (BIORAD0000002393), at p. 21.

⁷¹ Wadler Exhibit 7 (BIORAD0000009220-32 at 26); See also, Davis Polk, FCPA Inquiry: Status Report for the Board of Directors of Bio-Rad Laboratories presentation (BIORAD0000002393), at p. 21.

⁷² Wadler Exhibit 7 (BIORAD0000009220-32 at 29-32); See also, Davis Polk, FCPA Inquiry: Status Report for the Board of Directors of Bio-Rad Laboratories presentation (BIORAD0000002393), at p. 21.

⁷³ Wadler Exhibit 7 (BIORAD0000009220-32 at 21); see also Complaint ¶24.

⁷⁴ Wadler Exhibit 7 (BIORAD0000009220-32 at 29-32).

⁷⁵ Wadler Exhibit 7 (BIORAD0000009220-32 at 29-32, at 20).

conforming language in the Chinese-language agreements indicated an attempt by management to avoid anti-corruption responsibilities.⁷⁶

67. On February 8, 2013, Mr. Wadler had learned from Associate General Counsel Schumaker that the Chinese-language agreements were “the same form that had been used in China prior to [Bio-Rad’s] implementation of an FCPA compliant revision in early 2011.”⁷⁷
68. In April 2011, Bio-Rad had begun to utilize a standard distributor agreement that contained more robust anti-corruption language.⁷⁸ Indeed, the use of standardized contracts is a common control activity found in an effective internal control system, and would therefore be monitored by controls that fell under Mr. Wadler’s responsibility.⁷⁹
69. It was the General Counsel’s responsibility to implement internal controls to ensure that the correct, up to date contracts were being used, and to monitor the use of those contracts. However, from April 2011 until at least January 2013, it appears that Mr. Wadler failed to monitor the use of standardized distributor agreements in China – an internal control activity. According to COSO, “Monitoring ensures that internal control continues to operate effectively. This process involves assessment by appropriate personnel of the design and operation of controls on a suitably timely basis, and the taking of necessary actions.”⁸⁰
70. As Pat Norton of Steptoe, who ran the second FCPA investigation in China, explained in an email on February 27, 2013, the standardized contracts were prepared following the first FCPA investigation as part of Bio-Rad’s remediation efforts. The new distributor agreements included more extensive anti-corruption and FCPA representations and warranties and related audit rights, as well as related compliance certifications.⁸¹
71. According to Steptoe’s investigation, the distributor agreements had a number of clauses that used complex legal terminology, and that someone not absolutely fluent in English and knowledgeable of the law might have trouble understanding. Bio-Rad managers in

⁷⁶ Wadler Exhibit 7 (BIORAD0000009220-32 at 29-32, at 20-21).

⁷⁷ Wadler Exhibit 8 (Schumaker to Wadler email dated February 8, 2013).

⁷⁸ Davis Polk, FCPA Inquiry: Status Report for the Board of Directors of Bio-Rad Laboratories presentation (BIORAD0000002393), at p. 10.

⁷⁹ AICPA Audit and Accounting Guide (“AAG”), Assessing and Responding to Audit Risk in a Financial Statement Audit, revised as of September 1, 2014. An example control given in the AAG is: “The Company uses standard purchase order contracts. Any changes to these standard contracts must be approved by in-house counsel in advance.”

⁸⁰ COSO Internal Control – Integrated Framework Guidance on Monitoring Internal Control Systems, Volume II–Guidance, June 2008, page 3.

⁸¹ BIORAD0000013634: “As part of its remediation efforts, the company prepared a new Distributor [Agreement] that includes more extensive anti-corruption and FCPA reps and warranties and related audit rights, as well as related compliance certifications. One of the questions that has recently arisen is whether the China offices have implemented this measure correctly.”

China were unable to get a Chinese translation of the new English agreement from the General Counsel's office, so some distributors used the Chinese version of the old distributor agreement with some changes. Although Steptoe's investigation did uncover a number of differences between the contracts that suggested provisions may have been negotiated without approval, there was no indication that this was done to enable violations of FCPA.⁸² As such, in my opinion, there was another plausible explanation for the use of the old Chinese distributor agreements than what Mr. Wadler believed to be clear evidence of FCPA violations.

72. Furthermore, if Mr. Wadler had monitored the control activity and directed his staff to examine a sample of Clinical Diagnostic Group ("CDG") distributor agreements between April 2011 and December 2012, he would have discovered that the Chinese-language agreements were outdated. This would be typical of a Chief Legal Officer's internal control activities under the Framework.

VII. Mr. Wadler Significantly Contributed to, and Could Have Prevented, a Significant Deficiency in Internal Control over Financial Reporting Disclosed in Bio-Rad's 2012 Form 10-K.

A. Mr. Wadler's Intervention in the Life Tech Royalties Accrual Led to Bio-Rad's Significant Deficiency in Its Accounting Close Process for the Fiscal Year 2012 and Caused to Bio-Rad's Failure to File Its 2012 Form 10-K on Time

73. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control over financial reporting that is less severe than a material weakness, yet important enough to merit attention by those responsible for oversight of the registrant's financial reporting.⁸³
74. Management at Bio-Rad disclosed in their 2012 10-K that they "identified four significant deficiencies in our internal control over financial reporting as of December 31, 2012 related to our accounting close, revenue recognition, reagent rental and expenditure processes, that, when aggregated, constitute a material weakness in our internal control over financial reporting as of December 31, 2012."⁸⁴

⁸² BIORAD0000015811-15.

⁸³ <https://www.sec.gov/rules/final/2007/33-8829.pdf>.

⁸⁴ Bio-Rad 2012 Form 10-K, filed on March 18, 2013, page 78. According to the SEC, a material weakness is "a deficiency, or a combination of deficiencies, in ICFR [internal control over financial reporting] such that there is a reasonable possibility that a material misstatement of the registrant's annual or interim financial statements will not be prevented or detected on a timely basis." (<https://www.sec.gov/rules/final/2007/33-8809.pdf>).

75. Bio-Rad's 12b-25 filing dated March 4, 2013 stated that the accrual for royalties payable as of December 31, 2012 under certain patent licenses was the reason for Bio-Rad's late filing, along with, in part, recently raised issues that were not specified. The second FCPA investigation that was prompted by Mr. Wadler's allegations on February 8, 2013, was not stated as a reason for the delayed filing of Bio-Rad's 10-K for the fiscal year 2012.⁸⁵

"prior to the filing deadline because the Company has not finalized its assessment of the effectiveness of its internal control over financial reporting due in part to recently raised issues and has not finalized an accrual for royalties payable by the Company as of December 31, 2012 under certain patent licenses from a third party."

76. The second FCPA investigation was disclosed to auditors and regulators and the investigator's findings as of February 25 and 27, 2013 did not reveal significant issues that would prevent timely filing.⁸⁶ In my experience, companies regularly file financial statements in the presence of an ongoing investigation that is appropriately disclosed.

⁸⁵ Drapeau Exhibit 31 (Bio-Rad Form 12b-25, filed on March 4, 2013).

⁸⁶ BIORAD0000015823-6; Tsingos Exhibit 76 (Email from Tsingos to Nolet and Gubbels at E&Y on March 9, 2013, RE: Steptoe Meeting Notes, with February 27 Steptoe Call Notes attached), Tsingos Exhibit 77 (Email from Tsingos to Nolet and Gubbels at E&Y on March 9, 2013, RE: China Memo with Attachments, with China Distribution Agreements-Control Assessment attached), BIORAD0000013634-36 at 34-35 (February 27, 2013 email from Norton); Drapeau Exhibit 45 (February 25, 2013 email from Norton); Schwartz Exhibit 95 (Email from Schwartz to Norton on March 1, 2013). Bio-Rad did have three significant deficiencies in 2010 related to FCPA issues, constituting a material weakness in internal control over financial reporting (see the 2010 Form 10-K filed on February 28, 2011), but these issues were substantially resolved by early 2012 (Drapeau Declaration ¶¶4-5).

77. The following table contains the significant deficiencies disclosed in Bio-Rad's 2012 Form 10-K:⁸⁷

Significant Deficiency Category	Specific Significant Deficiency
Accounting Close	(1) Our failure to review and adjust a contingency accrual with respect to royalties owed to a third party in a timely manner
	(2) Inadequate supporting documentation for certain key transactions and account reconciliations at certain foreign locations
	(3) Lack of adequate financial statement review at German subsidiary
Revenue Recognition	(1) Unauthorized issuance of distributor contracts at Chinese subsidiary
	(2) Lack of controls over pricing and ineffective methods of analyzing credit risk
	(3) In some instances, lack of sufficient documentation for the timing of revenue recognition
Reagent Rental	(1) Failure to provide management review of reagent rental agreements
	(2) Failure to monitor ongoing compliance with agreement terms
	(3) Lack of timely reconciliations of reagent rental equipment
Expenditures	(1) Lack of compliance with controls for vendor management and transaction approvals at German subsidiary
	(2) Insufficient segregation of duties at German subsidiary.

78. Bio-Rad's CEO, Norman Schwartz, viewed the only reason for the late filing to be the accrual for the Life Tech Royalties:⁸⁸

Q: Okay. Why was the 2012 10-K filed late?

A: Because we -- we failed to -- to -- we had a disagreement, I guess, or -- about the -- about the -- the accrual for this Life Tech audit.

Q: Is that the only reason that the 10-K was filed late?

A: That's my understanding.

⁸⁷ Bio-Rad 2012 Form 10-K, filed on March 18, 2013, pages 77-78.

⁸⁸ Schwartz Deposition, 181:18-24.

79. Other witnesses also stated that the only reason for the late 10-K filing was Mr. Wadler's insistence that the Life Tech accrual be increased. Ms. Tsingos explained that February 28—after Mr. Wadler withdrew his agreement and insisted on an increase in the accrual—was the first time it came to Ms. Tsingos' attention that Bio-Rad would not be able to file its 10-K on time.⁸⁹
80. Deborah Neff, who was an "ad-hoc" member of Bio-Rad's Audit Committee in February 2013, confirmed that the filing was delayed due to Mr. Wadler's belated insistence that the Life Tech accrual be increased—not the second FCPA investigation.⁹⁰

B. Mr. Wadler did not Perform His Internal Control Responsibilities Concerning the Accounting Close Process

i. Relevant Internal Control Tasks that Were Delegated to Mr. Wadler

81. Based on the March 2013 memorandum from Bio-Rad's internal audit department, legal controls assigned to Mr. Wadler as of December 31, 2012 included:
- LE-6-010-010: The General Counsel has read SFAS #5⁹¹ – Accounting for Contingencies, and has procedures around reporting SFAS #5 contingencies such as pending or threatened domestic and international litigation, to the Corporate Controller for quarterly financial accrual and disclosure.
 - LE-6-010-020: Documentation is maintained by Legal to support all legal accruals and adjustments provided to Corporate Controller.
82. The Framework is useful for analyzing the causes of the ineffective legal controls determination at Bio-Rad. The Framework sets out five components of internal control:⁹²
- Control Environment

⁸⁹ Tsingos Deposition, 159:13-22, 206:25-208:6. Ms. Tsingos explained: "Q: Okay. Is it your testimony that as of February 28th the only thing you needed to file the 10-K was Mr. Wadler's legal memo and anything that had to be changed as a result of Mr. Wadler's legal memo? A: What I am saying is it was my belief that in order to file the 10-K we needed Mr. Wadler's memo which would have affirmed the accrual as it stood and was already booked as of 12/31 and some sort of disclosure language around continuing to investigate potential issues in China [...] [which] would have been a very quick turnaround from Latham" (Tsingos Deposition, 212:24-213:14).

⁹⁰ Neff Deposition (Rough) 146:10-146:17 ("Q. And it's your understanding that Mr. Wadler didn't [insist that the Life Tech accrual be increased] until a day or two before the [10-K] filing was due; correct? A. And that -- and that -- my understanding is that it came forward. People thought they had agreed, and then it changed. And it changed at such a late date that we couldn't deal with it, so we had to delay the filing").

⁹¹ SFAS #5 is now ASC 450. In July 2009, the Financial Accounting Standards Board ("FASB") codified all U.S. GAAP (including Statements of Financial Accounting Standards - "SFAS") into the ASC.

⁹² 1992 Framework, at Executive Summary; 2013 Framework, at Chapter 2 Objectives, Components, and Principles, Introduction.

- Risk Assessment
- Control Activities
- Information and Communication
- Monitoring Activities

83. In addition, the Framework contains seventeen principles representing the fundamental concepts associated with the five components of internal control. Principles provide clarity for the user in designing and implementing systems of internal control and for understanding requirements for effective internal control.⁹³
84. One principle relating to the control environment is “Management establishes, with board oversight, structures, reporting lines, and appropriate authorities and responsibilities in the pursuit of objectives.”⁹⁴ Organizations delegate authority and responsibility to enable management and other personnel to make decisions according to management’s directives toward the achievement of an entity’s objectives.⁹⁵
85. Mr. Wadler was responsible for at least two critical Bio-Rad control procedures to ensure an accurate and timely accounting close.⁹⁶
86. Tasks delegated to Mr. Wadler required effective communication. As a best practice, the finance department should own the financial reporting process, including the accounting close.⁹⁷ A complete, accurate and timely accounting close required Mr. Wadler to communicate with Bio-Rad’s finance department about contingencies and legal accruals. In my experience, it is common practice for the finance department to speak with a company’s legal officers about contingencies during the accounting close process and before a company’s earnings announcement.
87. COSO defines and explains the information and communication component of internal control as follows:⁹⁸

⁹³ The original framework implicitly reflected the core principles of internal control whereas the 2013 Framework explicitly states 17 principles. 2013 Framework at Foreword and at Chapter 2 Objectives, Components, and Principles, Components and Principles of Internal Control.

⁹⁴ COSO 2013 Framework, at Chapter 2 Objectives, Components, and Principles, Control Environment.

⁹⁵ COSO 1992 Framework, Reporting to External Parties, at p. 128-130; 2013 Framework at Chapter 5 Control Environment, Establishes Structure, Authority, and Responsibility, Authorities and Responsibilities.

⁹⁶ Controls labeled “LE-6-010-010” and “LE-6-010-020” (BIORAD0000021099-100 at 100).

⁹⁷ [http://www.ey.com/Publication/vwLUAssets/Closing_Excellence,_november_2011,_UK/\\$FILE/FAAS%20analyse%20-%20Closing%20Excellence%20-%20UK.pdf](http://www.ey.com/Publication/vwLUAssets/Closing_Excellence,_november_2011,_UK/$FILE/FAAS%20analyse%20-%20Closing%20Excellence%20-%20UK.pdf).

⁹⁸ COSO 1992 Framework, at Chapter 5: Information and Communication; COSO 2013 Framework at Chapter 8 Information and Communication, Chapter Summary and Introduction.

Information is necessary for the entity to carry out internal control responsibilities to support the achievement of its objectives. Management obtains or generates and uses relevant and quality information from both internal and external sources to support the functioning of internal control.

Communication is the continual, iterative process of providing, sharing, and obtaining necessary information. Internal communication is the means by which information is disseminated throughout the organization, flowing up, down, and across the entity.

Controls within Information and Communication support the organization's ability to use the right information within the system of internal control and to carry out internal control responsibilities.

Internal communication facilitates the functioning of internal control by sharing information up, down, and across the entity.

88. One of the COSO principles relating to the Information and Communication component of internal control is that "The organization internally communicates information, including objectives and responsibilities for internal control, necessary to support the functioning of internal control."⁹⁹

ii. Mr. Wadler's Performance of Internal Control Tasks

89. Bio-Rad's accounting close process included a set of meetings to facilitate communication of information necessary to ensure an effective and timely accounting close process.¹⁰⁰ These meetings included a disclosure committee meeting, audit committee meeting(s) and a legal meeting with the external auditor, E&Y. The following list provides the dates and meetings related to Bio-Rad's accounting close process:¹⁰¹

Date	Meeting or Event
February 19, 2013	Disclosure Committee meeting, including Mr. Wadler
February 20, 2013	Audit Committee meeting
February 21, 2013	Legal meeting with E&Y, including Mr. Wadler
February 25, 2013	Audit Committee meeting
<i>February 26, 2013</i>	<i>Earnings Release</i>
February 27, 2013	Conference call among outside legal counsel, Mr. Wadler, E&Y to discuss Mr. Wadler's new concerns
February 28, 2013	Meeting between Mr. Wadler and E&Y

⁹⁹ COSO 1992 Framework, at Chapter 5: Information and Communication; COSO 2013 Framework at Chapter 8 Information and Communication, Chapter Summary, Principles relating to the Information and Communication component.

¹⁰⁰ March 2013 memorandum from Bio-Rad internal audit at BIORAD0000021099.

¹⁰¹ March 2013 memorandum from Bio-Rad internal audit at BIORAD0000021099.

90. The legal meeting on February 21 was by no means the only opportunity for Mr. Wadler to interact with the auditors and express his concerns. Auditors and the General Counsel can hold ad hoc meetings as necessary. This is evidenced by the call and the meeting on February 27 and 28 when Mr. Wadler chose to voice his concerns.
91. According to Internal Audit, at the February 21 meeting, "The General Counsel also provided an update on the royalty audit and related litigation with Life Technologies but did not communicate any issues with the Company's existing litigation reserve for this matter."¹⁰² In fact, it seems that he affirmed the existing Life Tech accrual.¹⁰³ Therefore, as of February 21, the external auditors received corroborating audit evidence for the litigation reserve established by the company. If Mr. Wadler had concerns or information about an event that suggested the accrual needed to be changed, that was the time he should have raised them.
92. According to Internal Audit, at the February 27 conference call, "the General Counsel raised potential concerns over the amount of the Life Technologies legal reserve. This was the day after the company's earnings release. As a result of this meeting, the CFO and Corporate Controller reviewed the Life Technology reserve and had a follow-up discussions [sic] with the General Counsel and lead E&Y partner. All were in agreement that the reserve was in compliance with U.S. GAAP."¹⁰⁴
93. On February 28, according to internal audit, Mr. Wadler "changed his position from the previous day and stated that the reserve was not adequate."¹⁰⁵ Although the E&Y representative attempted to explain the applicable accounting rules to Mr. Wadler that supported the Life Tech accrual, Mr. Wadler insisted that the accrual be increased.¹⁰⁶ Bio-Rad's 10-K was due to be filed the very day after Mr. Wadler again changed his position as to the Life Tech accrual - on March 1st.
94. Estimates for loss contingencies change when events occur or circumstances change to indicate that the current estimate is no longer accurate. Accordingly, financial statement accruals are adjusted when estimates change.

¹⁰² March 2013 memorandum from Bio-Rad internal audit at BIORAD0000021099.

¹⁰³ Tsingos Deposition, 158:24-159:8 ("Sandy went down the list and affirmed what as on the list, which was the existing accrual").

¹⁰⁴ March 2013 memorandum from Bio-Rad internal audit at BIORAD0000021099.

¹⁰⁵ March 2013 memorandum from Bio-Rad internal audit at BIORAD0000021099.

¹⁰⁶ Tsingos Deposition, 198:22-199:8 ("Q: Okay. So you don't know whether the other memos that were not related to the Life Tech audit had been provided to Ernst and Young by the end of the day on the 27th? A: What I know is that the day after we released earnings, when Sandy expressed his now disagreement with the accrual as it was in the numbers that we had released, Chris Nolet thought, if he could sit with Sandy and explain to them what the accounting rules are, then Sandy would understand why the accrual is what the accrual is, based on the facts and circumstances."); 206:25-208:6.

95. I am not aware of any events that occurred between February 21 and February 28 to cause a change in the royalty accrual on the books of Bio-Rad. On the contrary, I've seen testimony that states that there were no relevant changes concerning Life Tech Royalties.¹⁰⁷
96. Further, Bio-Rad's CFO, Ms. Tsingos, among others, testified that Mr. Wadler did not effectively communicate relevant and quality information to the finance department in a timely manner.¹⁰⁸ In my opinion, and in accordance with the Framework, such communication is critical for the effective operation of internal control over financial reporting.
97. In addition to not communicating his concerns about the Life Tech Royalties in a timely manner, Mr. Wadler made factually deficient allegations about the Chinese distributor agreements three weeks before the filing deadline when he was responsible for their implementation for years.
98. To conclude, in my opinion, Mr. Wadler did not adequately perform his internal control responsibilities concerning the accounting close process because he did not follow procedures necessary to communicate relevant and quality information about the Life Tech Royalties accrual in a timely manner. Based on my review of the documents, my experience with internal controls, and my experience with accounting for accruals, Mr. Wadler was responsible for Bio-Rad's "inadequate accounting close process, including our failure to review and adjust a contingency accrual with respect to royalties owed to a third party in a timely manner."¹⁰⁹

VIII. Publically Traded Companies Face Serious Consequences from not Filing Form 10-K during the Time Period Prescribed by Regulations.

A. Filing Deadlines are Mandated by Regulations

99. The federal securities laws require public companies to disclose information on an ongoing basis. The annual report on Form 10-K provides a comprehensive overview of the company's business and financial condition and includes audited financial statements.¹¹⁰ The filing requirements for SEC registrants' annual reports on Form 10-K include a filing deadline that is determined by the market value of a company's common

¹⁰⁷ Tsingos Declaration, ¶7; Drapeau Declaration, ¶11.

¹⁰⁸ Tsingos Deposition, 43:15-22, 59:16-60:2, 92:6-15, 114:14-115:6; Drapeau Deposition, 125:18-126:3, 243:5-12, 286:6-17; Schwartz Deposition, 56:16-21, 72:19-73:1.

¹⁰⁹ Bio-Rad 2012 Form 10-K, filed on March 18, 2013, page 7.

¹¹⁰ www.sec.gov/answers/form10k.htm; <https://www.sec.gov/about/forms/form10-k.pdf>.

equity held by its non-affiliates.¹¹¹ Large accelerated filers – larger companies by equity market capitalization – such as Bio-Rad have 60 days after their fiscal year end to file their 10-Ks.

100. When a company cannot file its 10-K within the given timeframe, SEC rule 12b-25 requires the registrant to file a Form 12b-25¹¹² (also known as NT 10-K) no later than one business day after the initial 10-K due date and disclose the company's inability to file the report timely and the reasons therefore in reasonable detail.¹¹³ Filing this form gives the company additional time and must file the 10-K on or before the fifteenth calendar day following the prescribed due date.¹¹⁴
101. If the company can file its 10-K within the additional 15 days, the filing is not considered late. However, if the extended deadline is also missed, the filer can face severe consequences from the SEC, securities exchanges, creditors, and capital market participants.
102. Late filings are uncommon and undesirable. Especially, late filings by larger firms – large accelerated filers – are rare: only 1.2% and 1.7% of total untimely filings in 2012 and 2013 were by large accelerated filers, respectively.¹¹⁵ Bio-Rad's NT 10-K filing on March 4, 2013, was one of only 25 NT 10-K filings among large accelerated filers in 2013.¹¹⁶

¹¹¹ <https://www.sec.gov/answers/form10k.htm>; <https://www.law.cornell.edu/cfr/text/17/240.12b-2>. Companies whose public float exceed \$700 million are large accelerated filers and have 60 days after the end of their fiscal year end to file their 10-K. Companies whose public float is at least \$75 million but less than \$700 million are accelerated filers and have 75 days after the end of their fiscal year end to file their 10-K. Companies whose public float is less than \$75 million are non-accelerated filers and have 90 days after the end of their fiscal year end to file their 10-K.

¹¹² SEC Form 12b-25 (<https://www.sec.gov/about/forms/form12b-25.pdf>). See also, EDGAR Filer Manual (Volume II), August 2015 (<https://www.sec.gov/info/edgar/forms/edgform.pdf>).

¹¹³ <https://www.law.cornell.edu/cfr/text/17/240.12b-25>.

¹¹⁴ SEC Form 12b-25 (<https://www.sec.gov/about/forms/form12b-25.pdf>). See also, Audit Analytics, Late Filings: 2000-2015 Descriptive Statistics and Analysis, May 2016, at p. 2.

¹¹⁵ 17 and 25 NT 10-Ks were filed by large accelerated filers of the total 1,456 and 1,459 NT 10-Ks in 2012 and 2013, respectively (Audit Analytics, Late Filings: 2000-2015 Descriptive Statistics and Analysis, May 2016, at pgs. 5-6).

¹¹⁶ 17 and 25 NT 10-Ks were filed by large accelerated filers of the total 1,456 and 1,459 NT 10-Ks in 2012 and 2013, respectively (Audit Analytics, Late Filings: 2000-2015 Descriptive Statistics and Analysis, May 2016, at pgs. 5-6). According to Audit Analytics, a vendor of auditing data, there were 1,771 large accelerated filers as of March 13, 2014 (<http://www.auditanalytics.com/blog/public-company-auditor-market-share-2013-update/>). The average number of late filings per year over the ten year period between 2006 and 2015 was 34.2 (Audit Analytics, Late Filings: 2000-2015 Descriptive Statistics and Analysis, May 2016, at p. 6).

B. Regulatory and Contractual Consequences from not Filing Form 10-K in a Timely Manner

103. There are various SEC regulations that penalize untimely filings. Consequences of late filings may even include loss of SEC registration.¹¹⁷
104. Firms that file late may not use short form registration on Form S-3 and thus cannot make use of shelf registrations that enable firms to quickly access capital markets for a period of 12 months. The alternative long Form S-1 requires a lengthy SEC review and may not be approved by the SEC at the end.¹¹⁸
105. Issuers that do not file 10-Ks by the applicable deadline also lose their ability to file a Form S-8 registration statement during the delay. Form S-8 is used for offering securities under an employee benefit plan.¹¹⁹
106. Issuers that do not file 10-Ks by the applicable deadline also lose their eligibility under Rule 144 of the Securities Act of 1933. Rule 144 provides a safe harbor for the resale of restricted and control securities.¹²⁰
107. Securities exchanges also require timely filings. Firms that do not file their SEC filings in a timely fashion may face de-listing from the exchange they are traded at. De-listings have severe economic consequences including a decrease in liquidity for the company's shares and an accompanying decline in stock price.¹²¹
108. Many loan and bond covenants and other contractual covenants require timely SEC filings. Late filings may result in technical default on the covenants and costly renegotiations.
109. That none of these serious consequences were ultimately experienced by Bio-Rad does not alter my assessment that Mr. Wadler's actions were inappropriate. His conduct could

¹¹⁷ <http://www.auditanalytics.com/blog/non-timely-filings-an-overview/>.

¹¹⁸ <https://www.sec.gov/about/forms/forms-3.pdf>;
<https://www.sec.gov/divisions/corpfin/guidance/exchangeactrules-interps.htm>;
<https://www.sec.gov/about/forms/forms-1.pdf>.

¹¹⁹ <https://www.sec.gov/about/forms/forms-8.pdf>;
<https://www.sec.gov/divisions/corpfin/guidance/saferinterp.htm>.

¹²⁰ <https://www.sec.gov/investor/pubs/rule144.htm>;
<https://www.sec.gov/divisions/corpfin/guidance/exchangeactrules-interps.htm>.

¹²¹ NYSE Listed Company Manual, 802.01 Continued Listing Criteria, http://nysemanual.nyse.com/lcm/Help/mapContent.asp?sec=lcm-sections&title=sx-ruling-nyse-policymanual_802.01&id=chp_1_9_2_1; Shumway and Warther, Journal of Finance, December 1999; Sanger and Peterson, An Empirical Analysis of Common Stock Delistings, Journal of Financial and Quantitative Analysis, Vol. 25, No. 2, June 1990.

have caused serious regulatory and contractual consequences for Bio-Rad based on what could be known by a public company executive at the time.

C. Capital Market Consequences of not Filing Form 10-K in a Timely Manner

110. Equity markets react negatively to late filings. Firms that cannot file their 10-Ks in a timely manner face both a negative reaction at the time of the missed deadline and over the subsequent quarters.¹²²
111. The negative abnormal market reaction to a late 10-K filing is -1.96% on average. Even for those companies that state an intention to file within 15 calendar days of the missed deadline, the average abnormal market reaction is -1.69%.¹²³
112. The market reaction to Bio-Rad's missed filing deadline was -1%, though not statistically significantly different from zero.¹²⁴ Moreover, during the two-week period that Bio-Rad was late on its filing, Bio-Rad's stock price lagged the price of all of its peer firms that were identified in the competition section of Bio-Rad's 10-K.¹²⁵
113. Again, the market reaction does not alter my conclusions on the severity of Mr. Wadler's conduct and the potential problems it could have caused on Bio-Rad's stock price – harming the company and shareholders alike.
114. Should additional information come to my attention, I respectfully reserve the right to amend my report.

E. Emre Carr, Ph.D., CFA



Dated: July 1, 2016

¹²² Bartov, DeFond, Konchitchki, Capital Market Consequences of Filing Late 10-Qs and 10-Ks, 2011.

¹²³ Bartov, DeFond, Konchitchki, Capital Market Consequences of Filing Late 10-Qs and 10-Ks, 2011.

¹²⁴ On March 4, the day Bio-Rad filed the NT 10-K, the stock price closed down -1.0% at \$121.91. The closing price for the previous day was \$123.09 (Bloomberg).

¹²⁵ From March 1, the trading day before the NT 10-K was filed, and March 15, the trading day before Bio-Rad filed the 10-K, Bio-Rad's stock price decreased by 0.1% (from \$123.09 to \$122.97). Over the same period of time, all of Bio-Rad's peers were higher: Life Technologies (+6.1%), PerkinElmer (+1.7%), Thermo Fisher Scientific (+3.2%), Danaher (+1.8%), Becton Dickson (+4.0%), and Meridian Bioscience (+4.9). The average return of the peer group was +3.6% (Bloomberg); See Bio-Rad 2012 10-K, at p. 19 for peer group. In addition, the S&P 400 MidCap Index (Bio-Rad's chosen benchmark) increased +4.0% (Bloomberg).



Curriculum Vitae

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Dr. Carr testifies and advises clients on complex accounting, finance, and economics matters. His engagements span accounting (US GAAP and IFRS), corporate disclosure and governance requirements, securities, derivatives, risk management, structured finance, SEC and FINRA matters related to hedge funds, investment advisors, broker-dealers, and private equity firms, CFTC and NFA matters related to futures commission merchants, valuation analyses, damages analyses, economic materiality analyses, and loss-causation analyses.

Prior to joining BRG, Dr. Carr was a Senior Financial Economist at the SEC's Division of Risk, Strategy and Financial Innovation ("RiskFin", now Division of Economic and Risk Analysis) which was created as the agency's "think tank" to provide sophisticated, interdisciplinary analysis across the entire spectrum of SEC activities, including policymaking, rulemaking, enforcement, and examinations. He led the economic analyses and made recommendations on Dodd-Frank regulations regarding asset-backed securities and security-based swaps including credit default swaps; corporate governance regulations such as executive compensation, proxy statements, and board composition; investment advisor voting; financial reporting requirements such as presentation of liquidity and capital resources in managements' discussion and analyses and short-term borrowing disclosures; and PCAOB rules governing public company audits. He led the accounting and financial analyses in various enforcement cases involving debt securities, derivatives, and structured finance products against major financial institutions following the financial crisis. In addition, he was the accounting and disclosure expert in the development of the Accounting Quality Model – SEC's analytical tool for detecting accounting and disclosure violations and fraud, sometimes referred to as the RoboCop.

Prior to joining the SEC, Dr. Carr has served on the faculties of Columbia, USC (Marshall), Toronto (Rotman), and Northwestern (Kellogg) and is currently on the faculty of the University of Maryland (Smith). He has taught accounting, financial statement analysis, valuation, credit analysis, and corporate finance. His research on securities and banking regulations has been published in leading peer-reviewed academic journals.

EDUCATION

Northwestern University, Kellogg School of Management
PhD, Accounting Information and Management
PhD, Finance (ABD)

University of Southern California, Marshall School of Business
MBA, Finance



PROFESSIONAL EXPERIENCE

Berkeley Research Group

Washington, DC

Director, Financial Institutions Practice

October 2012 - present

Testify and advise clients on complex accounting, finance, and economics matters. Engagements span accounting (both US GAAP and IFRS including accounting for asset-backed securities, derivatives, trading activities, contingencies, revenue recognition, impairments, pensions, stock options, and fair values); SEC disclosure requirements; corporate governance; risk management; structured finance; Ponzi schemes; SEC and FINRA matters related to hedge funds, investment advisors, broker-dealers and private equity firms, CFTC and NFA matters related to futures commission merchants; loss-causation, damages, materiality, and valuation analyses.

Accounting and SEC Disclosures

- Analyzed the materiality of allegedly fraudulent accounting entries in a case against the Chief Accounting Officer of a Fortune 500 firm. Analyses included accounting for reserves, accounting for sale and leaseback transactions, impairments of real estate purchase options, “cookie-jar” earnings management, analysts’ consensus forecasts, and the materiality of meeting or beating analysts’ consensus forecasts.
- Analyzed accounting and SEC disclosures in whistleblower investigation of a technology company concerning goodwill and intangible impairment. Reviewed the stock and stock option rewards to the executive and the timing of his stock sales and option exercises.
- On behalf of Jon Corzine and others, consulted regarding internal controls at MF Global Holdings, Ltd., prior to bankruptcy. Testimony included analysis of the control environment under the COSO Internal Control - Integrated Framework, and the analytical work performed by independent accountants, CME Group, the Federal Reserve, and outside consultants. The analysis specifically looked at entity-level controls at the holding company level in detail to determine materiality of those controls to segregation of funds. Analyzed the materiality of allegedly fraudulent accounting entries in a case against the Chief Accounting Officer of a Fortune 500 firm. Analyses included accounting for reserves, accounting for sale and leaseback transactions, in the context of “cookie-jar” earnings management and beating analysts’ consensus forecasts.
- On behalf of Hank Greenberg and Howie Smith, consulted regarding internal controls and assessed compliance with the COSO Internal Control - Integrated Framework at American International Group relating to reinsurance treaties and consolidation of special purpose entities. The assessment included analysis of transfer of risk, the development of accounting guidance relating to SPEs from 1990 – 2002, and review of the organizational and reporting structure at AIG.
- Provided expert opinion regarding GAAP violations in the audit of investments in mortgage-backed and asset-backed securities, and credit default swaps under SFAS 5, SFAS 107 and FIN 45. The matter involved the audit of a hedge fund that failed during the financial crisis.
- Examined the restructuring of a hedge fund and whether accounting entries and disclosures made in conjunction with the restructuring were proper.
- Analyzed disclosures made by a bank that went into FDIC receivership regarding investments made in securities issued by government-sponsored enterprises (GSEs).



- Described the public equity offering process including SEC requirements and due diligence practices. The matter arose from a failed seasoned equity offering by an oil & gas company that had initially become public through a reverse merger.
- Examined financial statement disclosures and internal controls of a large pharmaceutical company in conjunction with off-label marketing practices.

Damages, Economic and Financial Analysis, Loss Causation, and Materiality Analyses

- Testified on whether the economic analysis of a multi-level marketing company supported the allegation of the FTC that the company ran a pyramid scheme.
- Submitted a declaration on appropriate disgorgement in an SEC matter against an investment advisor that lost customer funds in index futures investments and allegedly ran a Ponzi scheme.
- Calculated damages in an ERISA matter resulting from investments made in a structured product upon the recommendation of a pensions consulting firm; the structured vehicle ran a Ponzi scheme that invested in index futures contracts.
- Established loss causation in a matter against a large investment bank that issued preferred shares shortly before filing for bankruptcy.
- For a criminal matter valued mortgage-backed securities and demonstrated that the prices charged by a trader was not statistically different from their fair values, supporting the position that alleged misrepresentations by the trader were not material.

Asset-backed Securities and Structured Finance

- Provided expert testimony related to the underwriting and placement of securities by an asset-backed securities issuer from a regulatory, financial, accounting, and bankruptcy perspective. The case involved an insurance dispute regarding the underwriting of securities by a major bank following the bankruptcy of a financial institution that financed healthcare receivables.
- Provided expert opinion regarding GAAP violations in the audit of investments in mortgage-backed and asset-backed securities, and credit default swaps under SFAS 5, SFAS 107 and FIN 45. The matter involved the audit of a hedge fund that failed during the financial crisis.
- Provided expert opinion on disclosures and representations made in conjunction with the issuance and placement of collateralized debt obligations (CDOs).
- Provided expert consulting on the trading and pricing of credit default swaps by certain dealers.
- On behalf of Hank Greenberg and Howie Smith, helped analyze AIG's reinsurance treaties and consolidation of special purpose entities, including analysis of transfer of risk, and the development of accounting guidance relating to SPEs from 1990 – 2002. The assessment included analysis of transfer of risk, including ASC 944-20-05 - Reinsurance and SSAP 62R - Property and Casualty Reinsurance. In addition, assessed the economic motivations of certain finite risk and transformer transactions and the historical context of such transactions.
- Examined conflicts of interest and the commercial real estate appraisal process in the issuance of a CLO.
- Interpreted fiduciary duties of directors and service providers in private ABS issuances.

Futures Markets and Futures Commission Merchants (FCMs)

- Successfully challenged the SEC's disgorgement analysis in an alleged fraud against a CTA that used an investment strategy based on e-mini S&P 500 futures.



- On behalf of Jon Corzine and others, consulted on the scope of CFTC Regulation 1.16 and the role of independent accountants in protecting customer funds at MF Global, Inc., a CFTC-registered futures commission merchant and a SEC-registered broker-dealer. Analysis included application of CFTC regulations for both segregated and secured funds, and the calculation of required minimum balances for both, the availability and use of excess funds, and the interaction of FINRA rules with CFTC regulations.
- Conducted forensic accounting analysis of reverse repo investments and inflows and outflows of cash from a Commodity Exchange Act segregated customer account held by an FCM at a major bank.
- On behalf of a Fortune 500 FCM subject to CFTC Order, served as independent third party reviewer to assess measures implemented to correct CFTC findings of inadequate supervisory procedures (Regulation 166.3), inadequate credit and concentration risk policies and controls, stress-testing methodology, and liquidity risk management.
- On behalf of the National Futures Association (“NFA”), investigated the failure of NFA auditors to detect fraud at Peregrine Financial Group, Inc. The investigation analyzed audit standards and the regulatory and operational aspects of FCMs, as well as NFA and Joint Audit Committee procedures. The investigation produced a report of findings¹ and a report of recommendations.²
- Consulted on SEC investment-company and market-making regulations and CFTC FCM regulations in an insurance dispute against an issuer and market-maker of CDOs.

Broker-Dealer and Investment Advisor Regulations

- Successfully challenged the SEC’s disgorgement analysis in an alleged Ponzi scheme.
- Consulted on an insurance dispute that involves the determination of proper amount of disgorgement from a broker-dealer by the SEC.
- Consulted on various litigation matters related to Ponzi schemes, and broker-dealer and investment adviser conduct in FINRA, SEC, civil, and criminal matters:
 - Examined disclosures and alleged breaches of fiduciary duties by investment advisers in asset-backed offerings including CLOs, ABCP, MBS, and life settlements.
 - Analyzed the sufficiency of due diligence conducted by investment advisers, hedge funds, hedge fund-of-funds, custodians, and attestation service providers.
- Examined arrangements between clearinghouses, stock and options exchanges, custodians, sub-custodians, administrators, and other service providers and how these arrangements enable Ponzi schemes and other fraud.

US Securities & Exchange Commission (SEC)

Washington, DC

Senior Financial Economist, Division of Risk, Strategy & Financial Innovation (RiskFin)

2010 – 2012

Led the economic analysis in numerous SEC enforcement cases and rulemaking activities in the asset-backed securities (ABS), over-the-counter (OTC) derivatives, and disclosure and governance areas, working with teams from all SEC divisions and other US and international agencies; as the accounting and disclosure

¹ Report of Investigation: Analysis of the National Futures Association’s Audits of Peregrine Financial Group, Inc., http://www.nfa.futures.org/news/BRG/report_of_investigation.pdf.

² Recommendations Report: Analysis of the National Futures Association’s Audits of Peregrine Financial Group, Inc., http://www.nfa.futures.org/news/BRG/final_recommendations_report.pdf.



expert led the development of the Accounting Quality Model – SEC’s quantitative tool for detecting accounting and disclosure violations; received “Distinguished Service Award” and “Law and Policy Award” for work on Dodd-Frank Act (DFA) implementation. RiskFin was created as the agency’s “think tank” to provide sophisticated, interdisciplinary analysis across the entire spectrum of SEC activities, including policymaking, rulemaking, enforcement, and examinations.³

Registrant Reviews and Enforcement Referrals:

- As the financial reporting and disclosure expert, led the development and implementation of the Accounting Quality Model, an analytical tool detecting accounting and disclosure violations, referred to as the RoboCop by the media. Model helps evaluate accounting and disclosure quality and the likelihood of fraud by taking into account income, cash flows, accruals, and disclosures together with firm-specific and industry-specific factors; the Accounting Quality Model is designed for both SEC filings reviews of registrants and SEC enforcement activities.

Financial Reporting and Disclosure Rulemaking:

- Examined the potential consequences of the possible adoption of the International Financial Reporting Standards (“IFRS”) for the final SEC staff report under the work plan for the consideration of incorporating IFRS into the financial reporting system for U.S. Issuers.⁴
- Analyzed the economic impact of disclosure rules related to
 - executive compensation,
 - short-term borrowing,⁵
 - presentation of liquidity and capital resources in management’s discussion and analysis,⁶
 - broker-dealer custody,⁷
 - the application of the IFRS true-and-fair (substance-over-form) override in IAS 1 by foreign private issuers.
- Provided economic analyses of costs and benefits of standards being promulgated by other regulators including the PCAOB (e.g. communications with audit committees⁸) and the FASB (e.g. leases).

Enforcement Investigations:

Provided financial, economic, and accounting analyses on various SEC investigations and enforcement matters.

- Submitted a declaration on behalf of the Division of Enforcement regarding non-economically substantive transactions between a registrant and a special purpose entity to circumvent obligations under securities law and admitted into evidence by the court.⁹
- Investigated the valuation practices of a business development company that invested in and managed CLOs. Investigation resulted in a Wells Notice with an executive and a settlement with the company.

³ <http://www.sec.gov/news/digest/2010/dig111810.htm> .

⁴ <http://www.sec.gov/spotlight/.../ifrs-work-plan-final-report.pdf> .

⁵ <http://www.sec.gov/rules/proposed/2010/33-9143.pdf> .

⁶ <http://www.sec.gov/rules/interp/2010/33-9144.pdf> .

⁷ <https://www.sec.gov/rules/proposed/2011/34-64676.pdf> .

⁸ http://pcaobus.org/Rules/Rulemaking/Docket030/Release_2012-004.pdf .

⁹ <http://www.sec.gov/litigation/opinions/2012/34-67313.pdf> .



- Investigated structured product design and disclosures by a major insurance company. Investigation resulted in a settlement with the company and one of the earliest SEC awards to a whistleblower.
- Analyzed valuation, fair value reporting, accounting classification, and impairments of straight, convertible, and asset-backed debt securities, and structured products under US GAAP (SFAS 157, 115) and IFRS (IAS 39) by investment banks, hedge funds, private equity funds, and other investment entities and investigated the conduct of their auditors that resulted in several settlements and civil suits.
- Investigated loan impairments and loss reserves and related disclosures by major banks during the financial crisis under SFAS No. 5 and SFAS No. 114 following a tip received by the SEC Tips and Complaints System.
- Investigated design and valuation of collateralized debt obligations by investment banks.
- Calculated a broker-dealer's damages caused and assessed its ability to pay the proposed auction rate securities settlement in light of its capital requirements.

DFA Title VII, Derivatives Rulemaking and Derivatives Markets:

- Analyzed, made recommendations, and wrote the economic impact of proposed rules related to OTC derivatives under Title VII of the DFA:
 - Rules intended to address conflicts of interest at security-based swap clearing agencies, security-based swap execution facilities, and exchanges that trade security-based swaps (DFA Sec. 765).¹⁰
 - Rules regarding the obligations of security-based swap data repositories that would require them to register with the SEC and specify the extensive confidentiality and other requirements with which they must comply (DFA Sec. 763(i)).¹¹
 - Rules governing mandatory clearing and end-user exceptions (DFA Sec. 763).¹²
 - SRO rule change by clearing organization regarding to introduce cross-margining of certain positions cleared at the Fixed Income Clearing Corporation and certain positions cleared at New York Portfolio Clearing, LLC (FICC-2010-09).¹³
- Researched credit default swap (CDS) and other security-based swap markets using data from DTCC Trade Information Warehouse and presented results to SEC divisions, Chairman, Commissioners, and senior officers; worked on joint IOSCO report on CDS markets.¹⁴

Asset-backed Securities Rulemaking and ABS markets:

- Analyzed, made recommendations, and wrote the economic impact of proposed rules related to securitizations and ABS:
 - Rules governing ABS shelf eligibility conditions and removing references to credit ratings (Reg AB).¹⁵
 - Rules governing issuer due diligence in ABS offerings (DFA Sec. 945).¹⁶

¹⁰ <http://www.sec.gov/rules/proposed/2010/34-63107.pdf> .

¹¹ <http://www.sec.gov/rules/proposed/2010/34-63347.pdf> .

¹² <http://www.sec.gov/rules/proposed/2010/34-63556.pdf> .

¹³ <http://www.sec.gov/rules/sro/ficc/2011/34-63986.pdf> .

¹⁴ <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD385.pdf> .

¹⁵ <http://www.sec.gov/rules/proposed/2011/33-9244.pdf> .

¹⁶ <http://www.sec.gov/rules/final/2011/33-9176.pdf> .



- Rules governing disclosure of representations and warranties in ABS offerings (DFA Sec. 943).¹⁷
 - Rules governing risk retention (DFA Sec. 941).¹⁸
 - Rules governing conflicts of interest in ABS offerings (DFA Sec. 621).¹⁹
 - SRO rule change by clearing organization regarding guaranteed settlement and central counterparty services for MBS transactions (FICC-2008-01).²⁰
- Researched risk retention practices in ABS; briefed SEC Commissioners and senior officers on matters related to ABS; represented the SEC in interagency projects.

CONSULTING ENGAGEMENTS PRIOR TO THE SEC:

Consulted and testified on high-profile litigation matters related to valuation, GAAP, accounting fraud, structured finance, derivatives, disclosure, corporate governance, and bankruptcy in matters involving some of the largest banks, investment firms, and other Fortune 500 companies.

- Provided expert testimony related to analyst forecasts and recommendations in an ERISA matter to evaluate alleged breach of fiduciary duty by pension fiduciaries.
- Examined the accounting for complex structured finance transactions involving swaps, futures, and other commodities derivatives, and special purpose entities for the bankruptcy estate in connection with alleged accounting fraud and offering of asset-backed securities. Defendant investment banks settled the matter for over \$4 billion.
- Analyzed siphoning of funds in a bankruptcy matter that involved alter-ego and piercing the corporate veil analysis. As a result, the corporate veil was pierced and one of the largest private equity firms was found liable for maximum damages.
- Analyzed financial statements and disclosures related to alleged revenue recognition fraud in a software firm.
- Analyzed whether financial statements complied with GAAP (SFAS 125, 140) in the treatment of securitizations, special purpose entities, and customer acquisitions of the second largest US credit-card issuer.
- Examined the actions of the board of directors and audit committee in governance matter arising from alleged revenue recognition fraud prior to an acquisition of a technology firm.
- Analyzed financial statements and disclosures related to alleged fraud in accounting for acquisition related reserves, long-term contracts, and revenue recognition at a Fortune 500 conglomerate.
- Valued brand name and trademark in connection with a dispute following the acquisition of a global spirits brand.
- Valued intangible assets for international tax allocation agreement between a major technology firm and the IRS.
- Valued medical devices company prior to private placement.
- Computed shareholder damages related to alleged misleading disclosures prior to an acquisition.

¹⁷ <http://www.sec.gov/rules/final/2011/33-9175.pdf> .

¹⁸ <http://www.sec.gov/rules/proposed/2011/34-64148.pdf> .

¹⁹ <http://www.sec.gov/rules/proposed/2011/34-65942.pdf> .

²⁰ <http://www.sec.gov/rules/sro/ficc/2012/34-66550.pdf> .



ACADEMIC-EMPLOYMENT

Robert H. Smith School of Business, University of Maryland, College Park, MD
Visiting Assistant Professor of Accounting
August 2015 - present

Columbia Business School, Columbia University, New York, NY
Visiting Assistant Professor of Accounting
July 2008 – June 2010

Marshall School of Business, University of Southern California, Los Angeles, CA,
Assistant Professor of Accounting
July 2003 – June 2008

Rotman School of Management, University of Toronto, Toronto, Canada
Assistant Professor of Accounting
July 2002- June 2003

Kellogg School of Management, Northwestern University, Evanston, IL
Lecturer in Finance
June 1998 - December 1998

PUBLICATIONS

- *The economic impact of Dodd-Frank: The case of collateralized loan obligations*, *Westlaw Journal Derivatives*, Volume 20, Issue 23, October 10, 2014.
- *How will Halliburton affect securities class action defense?* *Westlaw Journal Corporate Officers and Directors Liability*, Volume 30, Issue 3, August 11, 2014 (with H. David Kotz).
- *An economic analysis of the SEC's ABS risk-retention rule re-proposal*, *Westlaw Journal Securities Litigation and Regulation*, Volume 19, Issue 15, November 22, 2013.
- *Dodd-Frank Title VII, The Most Economically Significant Rules*, *SEC Division of Risk, Strategy, and Financial Innovation 2012 White paper* (with S. Bauguess and A. Glass).
- *An Examination of the Impact of the Sarbanes-Oxley Act on the Attractiveness of US Capital Markets for Foreign Firms*, *The Review of Accounting Studies*, 2013, Vol. 18, Issue 2 , pp. 522-559 (with P. Hostak, T. Lys, and G. Yang).²¹
- *Was the Sarbanes-Oxley Act Good News for Corporate Bondholders?* *Accounting Horizons* 2011, 25(3): 465-485 (with M. DeFond, M. Hung, and J. Zhang).²²
- *Regulatory Capital and Earnings Management in Banks: The Case of Loan Sales and Securitizations*. *FDIC Center for Financial Research*, Paper No. 2005-05.²³

²¹ http://papers.ssrn.com/sol3/papers.cfm?abstract_id=956020 .

²² <http://aaajournals.org/doi/abs/10.2308/acch-50008?journalCode=acch> .

²³ http://www.fdic.gov/bank/analytical/cfr/2005/wp2005/CFRWP_2005_05_Karaoglu.pdf .



- *Economic Consequences of Accounting Fraud: Benchmarking against the Performance of Scandal Firms.* (with T. Sandino and R. Beatty; presented at 2007 AAA Management Accounting and Financial Accounting Sections Midyear, and AAA Annual Meetings).²⁴
- *The Market Reaction to the Sarbanes-Oxley Act: Cost of the Act for Past or Future Actions?* (presented at 2010 AAA Forensic Accounting Section Midyear Meeting).
- *Disclosure, Corporate Governance, Enforcement, and Cost of Capital in Emerging Markets,* Northwestern University, mimeo.

PRIOR TESTIMONY IN THE LAST FOUR YEARS

- Federal Trade Commission v. Vemma Nutrition Company, U.S. District Court for the District of Arizona, No. CV-15-01578-PHX-JJT (for Vemma).
- Testimony by deposition, in “JPMorgan Chase & Co., et al. v. Indian Harbor Insurance Company et al., Supreme Court of the State of New York, County of New York, Index No. 603766/08” (for Indian Harbor).
- Declaration in Securities and Exchange Commission vs. Gordon A. Driver and Axxess Automation, LLC, CV 09-3410 ODW (RZx) (for Driver).
- Declaration in Securities and Exchange Commission vs. Citizens Capital Corporation, Administrative Proceeding File No. 3-14401 (for the SEC).

RESEARCH PRESENTATIONS AND DISCUSSIONS

- American Accounting Association (AAA) Annual Meetings, 2002, 2005, 2006, 2012.
- University of Texas, Dallas, 2011.
- US Securities and Exchange Commission (SEC), 2010, 2011.
- Public Company Accounting Oversight Board (PCAOB), 2010.
- Columbia University, 2007.
- European Financial Management Association Meetings, 2007.
- Journal of Accounting Research Conference, 2007.
- AAA Financial Accounting and Reporting Section Midyear Meeting, 2005, 2006, 2007.
- Washington University, 2002, 2007.
- Journal of Financial Services Research Conference, Risk Transfer and Governance in Banking, 2004.
- FDIC Center for Financial Research Workshop on Banking and the Economy, 2004.
- AAA Western Region Meeting, 2004.
- Baruch College, 2003.
- Southern Methodist University, 2003.

²⁴ http://papers.ssrn.com/sol3/papers.cfm?abstract_id=930749.



- State University of New York at Buffalo, 2003.
- University of Chicago, 2002.
- Indiana University, 2002.
- Northwestern University, 2002.
- University of Toronto, 2002.
- University of Washington, 2002.
- University of California, Berkeley, 2002.

TEACHING EXPERIENCE

- Financial Reporting (MBA Core, Columbia Business School and Rotman School of Management).
- Financial Statement Analysis and Valuation (MBA and Master of Accounting, Marshall School of Business and Leventhal School of Accounting; Smith School of Business).
- Advanced Corporate Finance (MBA, Kellogg School of Management).
- Finance (Northwestern University Economics Department, Undergraduate Program).
- Teaching assistant for: Real Estate Finance; Credit Analysis; Security Analysis; Investments; Macroeconomics; Mergers and Acquisitions; Financial Reporting and Analysis; Corporate Finance (Kellogg MBA Program, Kellogg Executive Program, Northwestern Law School, USC MBA Program, Stanford Executive Education Program).

ACADEMIC SERVICE

Adhoc Reviewer: Review of Financial Studies, Journal of Accounting and Economics, Journal of Accounting and Public Policy, Journal of Financial Services Research, Hong Kong Research Council, Canadian Council of Social Sciences Research (SSHRC), American Accounting Association (AAA) Financial Accounting and Reporting Section Meetings, AAA Annual Meetings, AAA Western Annual Meetings.

AFFILIATIONS AND PROFESSIONAL TITLES

Chartered Financial Analyst, (CFA).
 Member, Stamford CFA Society.
 Member, American Accounting Association (AAA).

Materials Considered

Bates Stamped Documents

BIORAD0000002393	BIORAD0000015823-26
BIORAD0000002415	BIORAD0000015830-32
BIORAD0000002604-19	BIORAD0000020260
BIORAD0000006462-68	BIORAD0000021099-100
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Sanford S. Wadler, v. Bio-Rad Laboratories, Inc., Norman Schwartz, Louis Drapeau, Alice N. Schwartz, Albert J. Hillman, and Deborah J. Neff, Complaint, Case No. 3:15-cv-2356, May 27, 2015

Drapeau Exhibit 29

Drapeau Exhibit 31

Drapeau Exhibit 45

Schwartz Exhibit 95

Tsingos Exhibit 62

Tsingos Exhibit 72

Tsingos Exhibit 76

Tsingos Exhibit 77

Tsingos Exhibit 78

Wadler Exhibit 10

Wadler Exhibit 6

Wadler Exhibit 7

Wadler Exhibit 8

Wadler Exhibit 9

Wadler November 8, 2012 representation letter

Pleadings, Depositions, & Declarations

Declaration of Christine Tsingos in Support of Response of Bio-Rad Laboratories, Inc. to Complaint of Retaliatory Practices Under the Sarbanes-Oxley Act, March 19, 2014

Declaration of Louis Drapeau in Support of Response of Bio-Rad Laboratories, Inc. to Complaint of Retaliatory Practices Under the Sarbanes-Oxley Act, January 27, 2014

Deposition Transcript of Christine Tsingos, April 6, 2016

Deposition Transcript of Deborah Neff, June 24, 2016

Deposition Transcript of Louis Drapeau, April 4, 2016

Deposition Transcript of Norman Schwartz, April 14, 2016

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 - Bio-Rad 2012 Form 10-K, filed on March 18, 2013
 - Bio-Rad Form 8-K and Exhibit 99.1 attached to Form 8-K, filed on February 26, 2013.
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